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THE MORAL INDIVIDUAL

OUR experience may be graded in the following manner: sense-experience, the perception of objects, the presence of articulate ideas, and the awareness of self. The field of ethics is possible only in the last stage, for reflective self-consciousness is necessary to the rise of an ought.

The stream of consciousness moves along freely until it reaches the stage of thought. Here ideas present to consciousness distinct objects of choice. And the greater the conflict, the more intense the consciousness of self. It is not a conflict of these ideas, strictly speaking. Each one of these ideas reveals to consciousness some definite object, and through contrast with this object, consciousness is keenly aware of itself as a choosing and determining subject. It is not a question simply of something to be done. Were some one else to do the same thing, it might not be a question at all to this consciousness. No; it is a question of the self as doer and of the significance of the thing to be done for him. Experience has become self-conscious. It is in its own keeping. No one else can own this will. No one else can be just this self. And this is the essence of the feeling of individuality. It is the foundation of religion, of ethics and of all self-conscious initiative. Such an individual is his own center of reality. This birthright he can not sell. And just because he is such an individual he stands out absolutely unique. He is a reality duplicated nowhere else.

We can understand that famous discourse of the ancient Brahman hero who, although riding to war, confesses to his charioteer that it is only a question of casuistry who ought to be killed and who ought not. What philosopher including within his premises a balancing of *ego* over against *alter* has ever justly decided in favor of either? If he has, what are his grounds? What logic is there for self-denial, if my neighbor is simply one self and I another? You love us because we die for you! So much the meaner you: so mean that we think ourselves better, and live. He who runs can

not read the meaning of that Buddhaship that came from sacrifice of one's self to a hare. Either a doctrine can be followed out to its full or it ought to be given up. Was it not, therefore, the true Buddha who gave himself up? What else could a true Buddha do?

This problem is more serious than at first sight it appears to most students of ethical doctrine. Altruism is as irrational as a doctrine as egoism. And compromise, such as the greatest good of the greatest number theory, is only a makeshift. And there seems to be absolutely no way out. The subject, just because he is a subject, can not be a mere object. The will within is his own. And, therefore, just so far as he is a real individual he is independent of you and me. Mark the following from Hamlet:

Hamlet. Will you play upon this pipe?
Guildenstern. My lord, I can not.
Ham. I pray you.
Guil. Believe me, I can not.
Ham. I do beseech you.
Guil. I know no touch of it, my lord.
Ham. 'Tis as easy as lying: govern these ventages with your fingers and thumb, give it breath with your mouth, and it will discourse most excellent music. Look you, these are the stops.
Guil. But these can not I command to any utterance of harmony; I have not the skill.
Ham. Why, look you now, how unworthy a thing you make of me. You would play upon me; you would seem to know my stops; you would pluck out the heart of my mystery; you would sound me from my lowest note to the top of my compass: and there is much music, excellent music, in this little organ; yet can not you make it speak. Why, do you think I am easier to be played upon than a pipe? Call me what instrument you will, though you can fret me, you can not play upon me.

Here, now, the whole thing is beautifully brought out. A person is real because he belongs to himself alone. He has music of his own. He has ideas that you may or may not get. He may lie; he may deceive. The key to his music is in his own keeping. If he so choose, you and I shall never so much as hear it. He is not an instrument played upon from without, but a life that comes forth from within. It is the eternal beauty and glory of the Brahman system that it brings to the front this—however incomplete—absolutely fundamental truth, that the self is not to be found within the world of objects, because it is, first of all, its own immediate world, in that it is subject. There is an inner world of our own subjectivity that is absolutely ineradicable. No matter what the particular content, whether Shylock's miserable ducats or St. Paul's moral will, this feeling, usually unconscious and almost always logically unjustifiable on the part of most people, is an ineradicable characteristic of selfhood. And moral insight is nothing else than

the being able not only to know—we all know it—but to feel that other individuals have this same kind of experience just as ineradicably as we ourselves.

"When the object of feeling is great and complex, sensuous perception is impossible. Even with the feeling for a single personality this is so. A personality is never fully given in any single moment, or in any single situation. The feeling acquires an ideal character so soon as it seeks to embrace the personality in its totality and unity, which is as soon as it gets beyond the stage at which the object is only a means of personal gratification." Just as one can have no proper conception of self unless one's sensuous immediacy is apprehended as a moment in an ideal whole, so, as this fine passage from Höffding states, the ability to apprehend other selves implies this same process of idealization. Notice, we say 'other selves.' Other realities, as mere objects, as tools for our use, realities conceived as things, exist primarily for us. Another self, on the other hand, although it may be a means for us, must first of all exist as the fulfillment of its own ideas, not our own. It may well be that its own ideas and our own are fulfilled in common through one and the same will-act, this activity of will being either its own or ours; but it is because it is fulfilling its own ideas that the other self has chosen this part in common with us. This is the explanation of the seemingly paradoxical character of love, of altruism and of worship. Where this independence as end is degraded into means we have indeed not two selves but one, for the one has become a means to, and is lost in the other, and has as such ceased to be a self. If the self is the only end it is always so, and by what conceivable logic can one such self be sacrificed to another? The alter to whom this sacrifice is to be made is himself an ego: and so altruism is itself egoism under the cover of a sentimental terminology! If the selfhood of both alter and ego is not preserved, the personality of the one is wholly relative to that of the other, and quantity is supreme. If the self as subject is to be an end in itself, there can be no limit beyond which its quality of selfhood is degraded into quantity. But how can each individual person be an end in himself and, at the same time, unity in the world of persons be possible?

Every individual, just because he is an individual, must be a unique fact. Each individual is a reality which can be duplicated nowhere else. But this character of uniqueness is not peculiar to the human individual. Everything whatever possesses just this character. The beautiful gourd over which Jonah wept was just such a fact. The breath of the lily, the tint of the rose, is just such a fact. Those who lay stress on the indefinable character of the human individual can find an object of equal awe and wonder in

everything which exists. And further, exclusiveness is an accident of will; it is not its essence. If one love one's friends, it is not because one wishes to exclude others from one's affection. One's vote does exclude candidates not voted for, yet the aim of the vote is primarily not to exclude particular men, but to represent certain principles. A will which is indefinable is anything else but a truly self-conscious will. Only when the individual ceases its militant exclusiveness and becomes definable does it become positive. The little child, says Professor Baldwin,[1] not only notices that, as contrasted with things, persons are irregular in their actions, but he also notices that each one has his own regular kind of irregularity. Will is possible only when the stream of consciousness becomes an object to itself. And only so are individuals intelligible to each other.

In discussing the nature of the human individual there are two aspects to be noticed, and both must be treated with equal consideration. There is the aspect of instinct, impulse, heredity and all that makes for organization; and there is the aspect of intelligence, choice, will and all that makes for individuality.

Instinctive activity is not only first in order of time, it is more fundamental in the life of the organism. Will, individual choice, is the result of development; it is secondary and presupposes the realm of instinct and impulse as its foundation. When the optic mechanism of a newly hatched chick is stimulated by some object, the chick pecks at it instinctively. Some of the things it pecks at turn out to be bitter, some to be good. The sight of the former are associated with bitter sensations. Such objects come in time to be avoided. Here instinct is modified by individual experience. The chick, we say, reveals individual intelligence. The function of this individual experience is to modify, to inhibit and to guide instinctive activity.

Instinctive differs from reflex activity according to the extent of the organization involved. If the whole organism be involved, we speak of the behavior as instinctive; if only an incoming nerve, a ganglion and an outgoing nerve be involved, we have the typical reflex. Stout also speaks of the sensation-reflex. It is a form of impulsive activity set going by some sensation. Ideo-motor activity is a still higher form of mental activity. Every idea tends to carry itself into some active experience. But even here we do not have will, for the ideas carry themselves out mechanically, that is, without deliberation or choice. Now ideas are abstracts from the continuum of immediate experience, hence when called up even abstractly they represent some bit of experience. Impulse is stirred,

[1] 'Mental Development,' p. 126.

sometimes strong emotions are called forth by ideas. When, therefore, an idea representing or standing for some bit of interesting experience is inhibited by the presence of some other idea standing for its bit of experience, what happens? There is deliberation and there must be some choice before activity can result. This choice, this will, is itself an outgrowth of instinctive behavior. Will is dependent upon the fundamental processes of instinctive, reflex and ideo-motor activities. One does not choose to eat, although one may choose what particular things one will eat. One does not choose to live, although one may choose to live well. Will presupposes organization. One can will only what has been in some way first experienced. Learning to skate, swim or play tennis, like any kind of learning, is possible only by striking the proper activities and inhibiting the useless ones. A strong, enduring will is based upon some fundamental impulse; the idea comes in to guide, the original tendency to act. The idea lights up the way for the impulse.

The will is not coterminous with the individual self. It is the individuating aspect of the self, but instinct, impulse, the aspect of organization, is fundamental. Will is the wave, instinct the body of the stream. Will, therefore, and organization are not two contradictory facts. Each individual is himself an extremely complex organization. And the will is so far from being antagonistic to organization that it has its excuse for being wholly in the service of organized life out of which it has been evolved. When one idea is chosen rather than another, we have will. But each idea if left to itself would carry itself into conduct. This is so because all conscious experience is impulsive, motor. Will is never independent of organization. A willed act is always one of two or more impulsive tendencies which gets expressed through some idea. Plato's doctrine of the individual is the same as his idea of the state. Sense-experience corresponds to the laborers, reason to the thinking class and the will to the executive department. Each individual is an organization in himself. The primal characteristic of life is action. Ideation, reflection, is the product of development found only in man. When concepts are reached and actions take place in accordance with such concepts, we have voluntary conduct. But such conduct is not independent of its ground-plan, which is instinct, impulse and emotion.

As psychology, and particularly animal psychology, shows, instinctive behavior is the fundamental form of activity in all life. But instinctive behavior is a racial form of activity, and not the expression of individual experience. Instincts express the experience of the group, not that of the individual. And as instincts are primary and will secondary in the life of the individual, so in the

history of the group the social or instinctive is prior to the individualistic type of behavior. Virtues which are preeminently of social value are recognized first; virtues which are particularly individual in their significance are later. Will, self-consciousness, individuality, being a late development, the individualistic type of behavior does not exist in the early history of human life. The typical group life is seen in animals. Horses unite in common defense against an enemy. Wolves hunt in packs. Geese feed under the protection of a sentry.

If instinct is fundamental and will secondary, it follows that in primitive man the social instincts, such as we see in animals, were more fundamental than individual, voluntary actions. Only gradually did the individual will differentiate itself from the group. Such differentiation is the origin of man. It is the beginning of self-conscious will. The origin of man is synonymous with the differentiation of the individual will from the instinctive behavior of the group. In the animal no such differentiation takes place. His social conduct is performed instinctively. Man is an individual self. He distinguishes himself from, contrasts himself with, sets himself over against, his group. This may lead to real opposition between the individual and the group. Such opposition is coincident with the very existence of the individual will. As possessing his own will, man has a unique experience of his own individuality. But this is only one aspect of the human individual. Man has all the instincts of the animal. These instincts are the inescapable ties which bind him to his group, ties of family, social customs and religion. And it is the function of reason to get these fundamental instincts expressed in terms of will. Reason is not opposed to the instincts of the individual. The social instincts are fundamental in the individual; reason is an instrument evolved out of experience for its interpretation and further guidance.

Mr. Morgan, in his 'Habit and Instinct,' regards imitation as instinctive. The newly hatched chick comes to drink first by happening to peck at the water or through instinctively imitating the hen. But once experience is gained through instinctive imitation, later behavior is possible which is guided by individual experience. The resemblance of the imitative activity to the model gives pleasure. Failure means pain. "Instinctive imitation is thus an organic response independent of experience; intelligent imitation is due to conscious guidance, the result of experience, and based upon the innate satisfaction which accompanies the act of reproductive imitation."

Imitation plays an essential part in the development of the individual. It lifts the animal to the level of its species and the child

to the traditional level of its social group. Mr. Fiske has made us familiar with the meaning of what he has called the prolongation of infancy. It means the development of individuality. The individual animal, in so far as he is the creature of instinct, is largely fitted out early in his career with the means and ways of his behavior. In the child, on the other hand, there is comparatively little fixed response. His long period of growth makes possible his individual development.

The distinguishing feature in Baldwin's view of the self is that it develops, not through reflection, but through imitation; that its own individual sense of self is not first developed and is afterwards seen to develop on its social side. Through the innate tendency to imitation the child develops his own sense of self through imitating other selves. He does not mean that he has a knowledge of other selves before he knows anything of himself; he means that the child imitates others before he has any real knowledge either of himself or of others and that through this process of imitation he develops his own sense of self. The sense of self, therefore, fundamentally is just as social as it is individual. Baldwin's theory brings us back to the psychological position with which we began: that reflection and will are a late product of development, are secondary, and that impulse and instinct are primary in the development of experience.

The groundwork of the individual, reflective mind is the organized, instinctive life of the race. Will is secondary; instinct, reflex-action and impulse are primary. Abstract ideas are secondary; immediate experience is primary. What seems to be a will separated from the unity of life is merely an aspect, an individual phase of the total self. The will is not independent of instinct; its purpose is not to usher in a separation from the group, but to guide the organized life of the individual in its relation to the group. Will means individuality, but individuality does not mean exclusive independence. Will means that the organized totality of the self which earlier in the scale of evolution has been a matter of instinct is now partly in its own keeping. A share in the government of things is given over to the moral self, but because of the aspect of organization, the individual consisting of systems within systems, each is inescapably a member of his group. Will means control over relations, not independence of relations.

The movement of life prior to the appearance of human personality is continuously toward such an individual will. As we pass from the inorganic to the organic world and through the latter to man, we move from the more to the less general; we go more and more toward the particular. Mr. Spencer says that development is from indefinite homogeneity to definite heterogeneity. There is a

constant decrease of exactness as we pass from physics and chemistry on through the sciences of physiology, biology, psychology, ethics. Mathematics means less and less as we move along in the series, physical bodies, living organisms, individual minds. There is less and less universality, more and more differentiation, as we move through the spheres of physical law, plant life, animal instinct, human will. And within the human sphere development reveals increasing differentiation. The higher the civilization, the greater the individuality do we find in its members. In a gallery of rogues, it has been said, the individuals are more on a dead level than in a company of cultured gentlemen. Degeneration levels down our human individuality to the common level of instinct. Development, on the other hand, subordinates the general, the physical, the instinctive—the common to all—to the particular, will, choice—the distinctively individual. Herein is the separation of the human from the brute, the origin of freedom as contrasted with mechanical instinct. In short, herein is the origin of man.

But let us see what we have said. For we have traced development to a mere point. This free will, this individual, etymologically indivisible unit is so narrowed down that it has become a veritable abstraction. No such thing as a separate individual could exist. The human being has by no means ceased to be a member of the physical and animal worlds. And, besides, persons have a world of endless relationships, such as the family, the state, the church, of which the animal knows nothing.

The way out of this difficulty is not to get into it. And we shall not get into it if we do not regard the human individual as a separate, by-itself-existing reality.

The will is but the individual aspect of each individual self, which in other respects is as deeply grounded in the unity of life as any member of the animal world. But through a reflective, self-conscious will the self is partly in its own keeping. And this may lead, and commonly does lead, to an attempted separation from the unity of life in which the self is grounded. What differentiates the self from the world of nature, what makes it an individual, is the possession of a self-conscious will. But this does not unmake the unity which the self has with all the orders below it in the scale of life. At the same time it must be none the less an individual because of this underlying unity. The problem of human life, then, is to express in terms of will the fundamental unity of life which in the infra-human world is expressed in terms of law and instinct. Through the prism of thought the stream of life is individuated, differentiated into self-conscious wills. But the underlying unity remains. The problem is to get this deeper unity expressed through

and in these multitudinous wills. The instinct of sex expressed in terms of will is love. Upon this rests the institution of the family. The relationships with other beings, which in the animal world are controlled by more or less modifiable instincts, must be lifted into what has been called the world of appreciation, where they are voluntarily assumed. Upon this rests the state. The recognition of the source of life must be one of voluntary acceptance. Upon this rests the development of religion.

J. DASHIELL STOOPS.

IOWA COLLEGE.

ON 'FEELING'

I. In my judgment, we should gain in scientific accuracy and contribute toward progress were we to discard from our psychological and philosophical vocabularies the term 'feeling' altogether. 'Feeling,' like certain other terms constantly employed by psychologists and philosophers, among them 'consciousness,' 'perception' and 'sensation,' is unsuited for use in a scientific terminology. What has been said recently by Professor Perry and others regarding 'consciousness' may suffice so far as that term is concerned. As for 'perception,' most of us surely would join in the wish expressed by Professor Titchener in his St. Louis address, that the word 'perception' might be 'banished to the limbo reserved for unregenerate concepts and be replaced by a round dozen of concrete and descriptive terms.' As for 'sensation,' one who seriously strives to reach a definite, consistent and usable scientific meaning for that term will doubtless go through an experience somewhat like that which Professor Cattell related of himself at a meeting of the Psychological Association some years ago. As I recall his statement, it was that in his student days he and others took up with the late Croom Robertson the question, 'What is the meaning of sensation?' They continued their studies throughout an entire winter, meeting at Robertson's rooms fortnightly, and at the end of that time were no nearer a satisfactory answer than when they began. And no wonder, for the term means pretty much everything: with some, sensation is affective, the affective aspect of our mental reactions to sense stimuli; with others, it is not affective, but intellective (presentative); with others, among them Robertson himself, it is neither, but a *stage* of mentality below the rational and embracing conative as well as intellective and affective factors; and, not to prolong the list of meanings, with some experimental psychologists, no attempt is made to give the term any definite meaning at all. Now 'feeling,' with its many, and popular, connotations, is, like these other terms,

unsuited for scientific use, and only contributes to confusion instead of to clear thinking and scientific progress.

II. I am not, however, very sanguine that 'feeling' will be discarded altogether from our scientific vocabulary. I would remark, therefore, in the second place, that the meaning given to 'feeling' by the Associationists and by Mr. Spencer, Professor James and others seems to me to be especially unsatisfactory, and to be one which we can and ought to discard. These writers give 'feeling' the widest possible generic significance, and make it stand for every form of mental state, change or activity. This makes it equivalent to 'thought' as used by the Cartesians and as still used in such a phrase as 'the stream of thought,' and to 'idea' as used by Locke and as still used in the phrase 'association of ideas.' Now, of course, we must have such a generic term. But such a term should be as devoid of other and more specific connotations as possible; and surely 'feeling,' like 'thought' and 'idea,' is not. [For myself, I strongly believe that psychology and philosophy would be the gainers were we to follow the admirable suggestion made by Professor Huxley in his little volume on Hume and, in the interests of improved terminology, adopt the word 'psychosis' (with the adjective 'psychosial') as our generic term. Then we should have a strictly scientific and fairly unambiguous term for every mental state, change or activity, corresponding to the neurologist's 'neurosis' for any and every brain change or state.]

III. Assuming that we are to continue to use the term 'feeling,' it should be in the sense of 'affection' or 'affective psychosis,' terms much to be preferred to 'feeling' itself. Taking it in that sense, I would remark, in the third place, that I have never been able to accept the widely prevailing view which identifies 'feeling' with pleasure-pain or pleasantness-unpleasantness (Lust-Unlust). To say that all our feelings are constituted by elements of pleasure and pain and nothing else; that 'feelings *quâ* feelings are merely particular modifications of the agreeable or disagreeable'; that 'feeling as such has no quality, apart from the radical difference of the pleasant and the unpleasant' (Sully), seems to me to be due to imperfect psychological analysis or to philosophical preconceptions. More accurate and unprejudiced analysis shows, I believe, that feeling *as feeling* has quality as well as tone (intensity of pleasure-pain); that our feelings can be ranged along a scale as base or noble; that ideal categories and categories of value hold of them as affective states and not merely of the underlying or accompanying intellectual elements. With Stuart Mill, it seems to me absurd that while quality is considered as well as intensity in estimating all

else, the estimation of feeling should be supposed to depend upon intensity alone.

IV. The Wundtian tridimensional (or tridirectional) theory of the nature of feeling, that feeling takes three elemental forms or directions—pleasantness-unpleasantness, excitement-repose and strain-relaxation—which may be experienced in some cases independently of one another, does not seem to me to be sustained by the evidence, introspective and experimental. For example, I find no satisfactory evidence that there are states of feeling, whether called excitement-repose, strain-relaxation or by any other name, that are experienced wholly apart from pleasantness-unpleasantness; that is, that have no pleasure-pain shading or tinge. As for Wundt's second and third elemental characteristics or directions, excitement-repose (Royce's restlessness-quiescence) and strain-relaxation, I can not rid myself of the conviction that they are not feelings proper at all, but are effects or accompaniments, organic or mental, which are confounded with affective states proper.

V. Finally, while I am not prepared to accept Dr. Marshall's doctrine that 'feeling is the empirical ego which has not yet become explicit,' I find myself in full agreement with much of the psychological matter in his interesting paper and especially with the emphasis laid upon the characteristic of 'subjectivity' as of the essence of feeling. In Hamilton's well-known phrase, 'feeling is *subjectively subjective.*'

GEORGE M. DUNCAN.
YALE UNIVERSITY.

SOCIETIES

THE FOURTEENTH ANNUAL MEETING OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

THE American Psychological Association held its fourteenth annual meeting on Wednesday, Thursday and Friday, December 27–29, 1905, in Emerson Hall, at Harvard University, in affiliation with the American Philosophical Association. The meeting was one of the most successful in the history of the Association, in point of attendance and in the general interest in the program presented. The wealth of papers precluded the possibility of such discussion as would seem desirable at the meetings of the Association. The papers were grouped and distributed at the various sessions with a view to giving, as far as possible, unity to the program of each session. Wednesday morning was given over largely to comparative and abnormal psychology, Thursday morning to general psychology and Friday to experimental psychology, followed by a *conversazione*

and demonstrations of apparatus and methods used in the researches in progress at the Harvard Psychological Laboratory.

The president of the Association, Professor Mary Whiton Calkins, of Wellesley College, presided at all of the sessions. At the opening session on Wednesday, Professor G. V. N. Dearborn, of Tufts College, first presented a paper on 'The Relations of Muscular Activity to the Mental Process.' Professor Dearborn held that there was no ground for the universal acceptance of brain protoplasm as the sole physical correlate of mind and suggested the claims of muscle protoplasm to be considered as representing a partial, and it may be the more important, correlate of the mental process. The various properties of muscle protoplasm satisfy the criteria of correlation better than does the cerebral cortex. Dr. Irving King's paper, 'How can the Relation of the Conscious to the Subconscious be Best Conceived?' was a criticism of the conception of consciousness after the analogy of the visual field. Consciousness is best conceived as a point correlated with a certain degree of organization of neural processes. The point of consciousness is modified by outlying neural processes and dispositions which in a vague way affect the movement of the central organization. These outlying neural processes and dispositions are the subconscious. The five following papers were devoted to comparative psychology. Dr. Robert M. Yerkes reported the results thus far obtained in a study of 'The Senses and Intelligence of Japanese Dancing Mice.' These mice appear to be degenerate forms. Tests of the various senses and of ability to discriminate and learn have yielded almost entirely negative results. Dr. J. P. Porter, of Clark University, presented two papers, one being a brief report of a 'Further Study of the English Sparrow and other Birds,' the other on 'The Habits and Instincts of Spiders, Genera *Argiope* and *Epeira.*' The first was a study of the learning-process in a vesper sparrow, a cow-bird, four English sparrows and two pigeons, with notes on individual differences. The second paper, illustrated by the stereopticon, showed the great variability in the web-spinning instinct of spiders as to the selection of a place for the web, and, in the case of those that build one, of the nest and its material. Variations in time of spinning, in adaptations in feeding habits, variability in courtship and evidences of intelligent control were discussed. Professor Wm. Harper Davis followed with a discussion of 'Variations in the Nests of a Spider, with a Comment on the Measurement of the Variability of Instincts.' Professor Davis exhibited a series of nests of another species of spider which binds grass or sedge blades to form boxes for the protection of its eggs, and discussed the variations and their causes. The marked individual differences which appear probably represent variations in instincts and

adaptations to unusual conditions. It was pointed out that a study of such variations may furnish an objective measurement of variability in instincts, if the numerous other factors which are undoubtedly present can be eliminated. Considerable interest attaches to these preliminary discussions in view of the fact that it is usually held that variability in instincts can not be determined quantitatively. Professor William Morton Wheeler's paper on 'The Ant Queen as a Psychological Study' indicated the great psychological changes which take place at the various stages in the life history of the ant queen. The striking contrast between the ant queen and the queen honey-bee was interestingly set forth. The queen honey-bee is a degenerate, a mere reproductive machine; the ant queen is a perfect exemplar of the species, taking up vicariously most of the characteristic functions of the workers. The three succeeding papers dealt with some of the problems of abnormal psychology. Dr. E. Cowles's paper on 'Conscious Experiences and the Somatic Group of Senses' called attention to the importance of the somatic group of senses for psychiatry, which has hitherto concerned itself largely with the motor aspects of mental life and expression to the neglect of the inner sensory field. The somatic sensations are added to the experiences from the physical group of senses to the outer 'life of relation' and exert a controlling influence upon the mind; hence the importance of their study. In a paper on 'The Nature of Hypnotic and Post-Hypnotic Hallucinations,' Dr. Boris Sidis questioned the validity of the hypnotic hallucination and the central origin of hallucinations. Experiments and observations on many subjects tend to prove that hypnotic or post-hypnotic hallucinations are neither peripheral nor of the alleged central origin, but are spurious in character, in a word, delusions. Dr. Morton Prince's paper on 'The Psychology of Sudden Conversion' gave a report of a case of sudden conversion similar to the Ratisbonne case discussed by Professor James. By putting the subject into two different hypnotic states the processes antecedent to the crisis were discovered. The subject had gone into a trance during which various dream states connected with ecstatic emotions had developed. The persistence of the ecstatic emotions after waking as a state of exaltation accounts for the conversion. There was accordingly no incubation of ultramarginal or subconscious ideas as James's theory holds.

After the adjournment of the session, the members of the Association were entertained at a luncheon given by the Harvard Corporation at the Harvard Union.

Inasmuch as this meeting was the occasion for the formal opening of Emerson Hall, the new building at Harvard devoted to philosophy and psychology, special dedicatory exercises were held on Wednesday

afternoon, Professor Münsterberg, chairman of the department of philosophy, presiding. Addresses were made by President Eliot and Dr. Edward Waldo Emerson. Following these exercises there was a joint discussion with the American Philosophical Association on 'The Affiliation of Psychology with Philosophy and with the Natural Sciences,' Professor Dewey, president of the Philosophical Association, presiding. The participants in this discussion were Professors Münsterberg, Frank Thilly, James R. Angell, A. E. Taylor, Wilhelm Ostwald and President G. Stanley Hall. Professor Münsterberg strongly contended for the affiliation of psychology with philosophy as typified in Emerson Hall. He urged the immeasurability of mental phenomena and the impossibility of applying to them the methods of the natural sciences. President Hall as warmly contended for the affiliation with the natural sciences. Psychology is 'a description as accurate as may be of all those facts of psychic life, conscious and unconscious, animal and human, normal and morbid, embryonic and mature, which are demonstrable and certain to be accepted by every intelligent, unbiased mind which fully knows them.' The best principle of organization of these facts is evolutionary. "Psychology is excluded from no field of experience, inner or outer, or of life, conscious or unconscious, religious, social, genetic, individual, that can be studied on the basis of valid empirical facts." Its closest allies are to be biology, physiology and anthropology. Professor Thilly insisted that the fact that mind can be studied in connection with matter does not make psychology a natural science. Psychology is concerned with a unique body of facts, and a knowledge of their material antecedents would not give a knowledge of mind as such. That psychology is a natural science because it employs the methods of science is also untenable. Professor Angell urged the affiliation with both philosophy and the natural sciences. Psychology has a philosophical lineage and certain highly important philosophical foundations. On the other hand, in many of its methods and ideals it approaches the position of the natural sciences. Professor Taylor held that the affiliation of psychology is with the natural rather than with the philosophical sciences. Psychology is dependent upon empirical premises based upon the testimony of direct perception, and hence resembles the empirical sciences. The fact that it is concerned with 'individual objects' and non-quantitative processes does not make it the less a natural science. Moreover, it makes no use of the concept of ideal norms of value.

On Wednesday evening President Calkins read her address on 'A Reconciliation of Structural and Functional Psychology.' The abstract of this address is here reproduced in full.

"Psychology is the study of the conscious self. Not the psychic

event—the mental process or idea—is the basal fact of psychology, but the self from which every psychic event is a mere abstraction. This self of the psychologist must be sharply distinguished, first, from the philosopher's self, the object of metaphysical study; second, from the biologist's self, the animal body which 'has consciousness,' and, finally, from the sociologist's self, the self regarded as member of a community.

"The scientific study of the conscious self involves two essential procedures: first, the analysis of its consciousness into structural elements, sensational, affective and the like, and, second, the enumeration and classification of its relations with its environment, that is, with other selves and with objects. The first of these procedures is the distinctive feature of structural psychology; the second is the fundamental motive of functional psychology. The essentials both of structural and of functional psychology are, thus, combined in psychology as study of a self; for this self is both a complex of elemental experiences and a complex of relationships to its environment."

Immediately after the address the members of the Association were entertained at a reception at the home of Professor and Mrs. Münsterberg.

The Thursday morning session began with an interesting 'Discussion on the Definition of Feeling.' The discussion was opened by two papers on this subject; the first by Dr. Henry Rutgers Marshall, the second by Professor H. N. Gardiner. Dr. Marshall called attention to the various uses of the term feeling to designate (1) touch, (2) the organic sensations, (3) emotion, (4) pleasure-pain and (5) mere emphatic experience as such. Feeling can be identified with no one of them. The emphatic characteristic of all experiences which are described by the word is found in 'subjectivity.' "Feeling proper is a certain vague mental form which when more clearly defined develops into the empirical ego of self-consciousness. Feeling is thus the empirical ego which has not yet become explicit." Professor Gardiner's examination of the various meanings of the term, as commonly used and which the psychological use of the term should cover as far as possible, led to the following definition: "Feeling may be defined as the immediate consciousness of the modification of the individual experience, as such; a feeling, as the content of consciousness, however constituted, regarded as the immediate modification of such experience." A set discussion followed the reading of the papers, the general trend of which can only be briefly indicated. Professor Angell held that subjective reference must be the most important element in any definition. Feeling must be defined more or less arbitrarily. If it is to have psychological status, emphasis

must be placed on its subjective character and in what this consists. Professor Duncan was of the opinion that there would be a gain in accuracy and in scientific progress by discarding the term feeling entirely as unsuitable for a scientific terminology. 'Affection' or 'affective psychosis' are better terms, being free from popular connotations. The essence of feeling lies in 'subjectivity'; feeling is 'subjectively subjective.' President Hall considers that it is entirely delusive to attempt to define feeling. Definitions are the last product of development. Knowledge and description of the facts is the important thing and the best possible definition. If feeling must be defined, the definition must cover the whole of mental life. Consciousness as in strong feeling is subordinate to feeling. Feeling is wider and older genetically than intellect or will. Professor Washburn suggested one of the most specific definitions as follows: "Feeling in its broad sense may be defined as the unanalyzed and unlocalized part of consciousness." It is necessary to distinguish between processes which are not analyzed or localized at a given moment because they are not in the focus of attention, processes which are not normally analyzed or localized, such as the organic sensations, and processes which resist all analysis and localization. Professor Judd criticized the ascription of vagueness to feeling. Feeling is vague only when the attempt is made to submit it to the categories of cognition. It has a distinctness and clearness of its own. 'Attitude' is one of the essential constituents of every mental state and this term characterizes better than feeling its subjectivity, universality and relation to the empirical ego.

The two papers which followed were on Attention; the first by Professor William H. Burnham on 'Attention and Interest.' Attention and interest are to be regarded as different aspects of the same process. Attention is a reaction of the whole organism comparable to the tropisms, while interest is the affective state correlated with this reaction. "The feeling of the organic adjustment in attention is the interest." The second paper, by Dr. J. P. Hylan, on 'Excursive Attention,' was an argument, based on the impossibility of a simultaneously divided attention and on the rapidity of mental fatigue, for the use of the term 'excursiveness' to characterize the wandering or shifting of direction in the varying states and degrees of attention. This excursiveness may be either of the reflex type, as in perception, or conscious and voluntary, as in adjustments to various complex conditions of life. Professor I. Madison Bentley's paper on 'The Psychology of Organic Movements' was a systematic analysis of the treatment of organic movements in psychologies. The motor elements where they enter in as primary factors in mental life may be referred to the general psychological system or subsumed under some

single motor theory. 'Motor' theories are of two general types; the first type emphasizing the motor conditions of consciousness, the second the motor consequences. The paper was a plea for a more careful study of the psychology of 'coordination' and 'adjustment' and the conscious activity which seems to be its primary postulate. Professor Stratton's paper on 'Modified Causation for Psychology' was deferred until Friday morning. Professor Stratton urged that 'concomitant variation' might well be taken as the chief criterion of causation in psychology without requiring quantitative equivalence or qualitative continuity. Psychology need not feel bound to accept the idea of causation of physics any more than philosophy.

At twelve o'clock Professor Wilhelm Ostwald addressed the Association on 'Psychical Energy.' Professor Ostwald maintained the possibility of extending the concept of energy so as to include mental as well as physical facts. Just as every physical fact can be best described by defining the kind and magnitude of energy involved in it, so there seems to be no contradiction in considering psychic facts also as being the results of transformations of energy of some sort. This energy may be unique in kind or the combination of two or more energies. If we knew the exact amount of energy contained in the human body at any instant, the transformation of energy resulting from a mental process at the next succeeding instant which did not appear in any other known form would constitute psychic energy. The theory proposed has a distinct advantage over psychophysical parallelism, providing as it does for a functional relationship between the mental and physical worlds. Following the address of Professor Ostwald there was a general discussion participated in by Professors Royce, Ladd, Hibben, Marvin and President Hall.

After the business meeting of the Association in the afternoon, there followed a conference on the subjects, 'Cooperation between Laboratories and Departments of Different Institutions' and 'Elementary Instruction in Psychology.' Professor Judd opened the discussion with a paper on the first topic. He held that each laboratory must determine its own problems and methods, and that in this respect cooperation was impracticable. It would be profitable, however, for laboratories to cooperate in matters concerning apparatus and in the publication of psychological results. The division of the Association meetings into sections for the more thorough consideration and discussion of particular papers and problems is desirable, and at the general meetings more discussion of methods and courses of instruction. Professor Sanford outlined a 'Sketch of a Beginner's Course in Psychology.' The subject-matter of the course suggested, which must begin with what is closely

related to the habits of thought and interests of the students, might be included under the following topics and in the following order: (1) Psychology of Learning and Acquisition; (2) Psychology of Truth and Error; (3) Psychology of Emotion; (4) Psychology of Personality and Character; (5) Facts of the Interdependence of Mind and Body; (6) Psychogenesis; (7) Systematic Psychology. In the general discussion which followed cooperation between psychological laboratories and hospitals for the insane and feeble-minded was emphasized by several speakers. There is here a wealth of opportunity which university laboratories have not availed themselves of. Cooperation in mutual criticism of psychological results was also suggested. The discussion of elementary instruction emphasized the importance of concreteness in subject-matter, the necessity of experimental demonstrations and laboratory work and the shortcomings of the lecture method of instruction.

The address of the president of the Philosophical Association, Professor John Dewey, on 'Beliefs and Realities,' occupied the evening session. This was followed by the smoker of the two Associations at the Harvard Union. The lady members of the Associations were entertained at the home of Professor and Mrs. Royce.

The papers read at the Friday morning session discussed various problems in the psychology of vision, the first three dealing with color vision, the remaining four with eye movements and related mental processes. Professor Will S. Monroe reported the results of experiments on the 'Color Sense of Young Children.' Tests had been made on 400 children between the ages of three and six in the matching and naming of colors and in color preferences, single and in combinations. Sex differences were not marked. The standard red was at all ages oftenest matched, named, preferred and used in color combinations, with blue second. Marked individual differences appeared. Dr. J. W. Baird, in a paper on 'Primitive Color Names and the Primary Colors,' summarized the arguments which have been made to prove the color-blindness of the early races of mankind and the evolution of the color sense in the spectral order from red to blue. Both conclusions were held to be erroneous. The phenomena of color-blindness and of indirect vision support the view that the color senses were developed in pairs in the following order, black and white, yellow and blue and, finally, red and green. Dr. Kate Gordon reported 'A Study of After-images on the Peripheral Retina,' based on experiments made by herself in conjunction with Dr. Helen B. Thompson in the Mt. Holyoke Laboratory. The influence of back-grounds of varying brightness on the color-tone of the after-image and on the stimulus-color was indicated. The striking result was obtained that a subliminal color stimulus may produce a

supraliminal after-image of appropriate color-tone. Finer discriminativeness was shown in the red-yellow end of the spectrum than in the blue-green, both in the stimulus and in the after-image.

Of the papers on eye movements, Professor C. H. Judd's on 'Photographic Studies of Convergence' brought out the fact that in the movements of convergence the two eyes move at different rates. In divergence the differences in rate of movement are not so marked. A sympathetic lateral movement, on the part of the eye which converged more slowly, in the direction of the movement of the other eye was frequently noted. "These facts show that even in fully developed adult convergence the movement is not wholly automatic and independent of the retinal images which arise during the movement." Professor Robert MacDougall reported an investigation 'On the Influence of Reflex Stimulations to Eye Movement upon Judgments of Number.' Comparative estimates of two groups of stimuli simultaneously presented, one of which was arranged with a view to producing a greater reflex stimulus than the other, seemed to show that the estimates were affected by such arrangements, though no quantitative results were obtained as to the various factors involved. Professor Edwin B. Holt presented a paper on 'Vision during Dizziness.' The nystagmic movements of the eyes during dizziness are slow in one direction and more rapid in the other. The speed and extent of these movements were measured. The rapid movements allow no visual sensations to reach consciousness, while the slow do. This accounts for the movement of the visual field in one direction during dizziness. The rapid movements are held to occasion or occur concomitantly with a 'central anesthesia.' Professor R. S. Woodworth, in a paper on 'Vision and Localization during Eye Movements,' maintained that vision during 'eye-jumps' does not differ essentially from vision with the resting eye, given the same retinal stimulation. The principal evidences adduced in favor of this view were, that if by movement of a mirror the field of view is shifted past the fixed eye, the same appearances are observed as in eye-jumps; and that a clear image thrown on the retina during an eye-jump by an object moving in the same direction is correctly localized in space and not as an after-image, as the theory of 'central anesthesia' would suppose. Moreover, the reaction-time to an object so seen is not long enough to include any considerable period of anesthesia or inhibition. Following Professor Woodworth's paper there ensued a discussion of visual consciousness during rapid eye movements which was continued into the afternoon session.

The first paper read in the afternoon was by Professor E. A. Kirkpatrick on 'Growth of Vocabularies.' This was a preliminary re-

port on the size of vocabularies, from the second grade to the university. A hundred words, selected by chance from the dictionary, were marked as 'known,' 'unknown' or 'doubtful.' It was suggested that this test might serve as a measure of the general intelligence of pupils. Professor C. E. Seashore's paper on 'Training in Singing by Aid of the Voice Tonoscope,' described various recent improvements in the tonoscope. Tests by this instrument were reported, showing that training for accuracy in control of the pitch of the voice in singing progresses much more rapidly and may reach a higher degree of efficiency than training without it. "It was also demonstrated that the least producible change in the pitch of the voice, in the different parts of an octave within the middle range, is a constant fraction of a tone." Mr. Frederic Lyman Wells, of Columbia University, reported some of the more important results from a study of 'Linguistic Lapses.' Linguistic lapses are always involuntary, central, not necessarily conscious, and referable to a physiological basis. They fall into five general types, the assimilation, the dissimilation, the omission, the substitution and the metathesis. Various general conclusions, on a basis of a comprehensive study of the lapse, were drawn concerning these types and their causes and concerning the relations of sensory and motor lapses. Mr. Wells holds that the study of lapses substantiates the view of individual localization for individual motor linguistic elements. Dr. Charles T. Burnett's paper on a 'Comparison of the Maximum Rates of Actual and of Imagined Voluntary Rhythmic Muscular Movement' brought out the fact that the maximum rate of imagined rhythmic movement is much smaller than that of the corresponding actual movement. Practise effect was found to be greater with the imagined movement. Variability is greater with the actual movement. The relation of these results to the classical theory of volition was pointed out. Dr. J. P. Hylan gave a demonstration of 'A New Kymograph,' following which the last paper on the program was read, by Dr. J. E. W. Wallin, on 'Investigations on Rhythm, Time and Tempo.' The limens of rhythmical interval were found to follow approximately the Weber-Fechner law. The time limen, which is lower than the rhythm limen, is relatively lower for the longer intervals. Preferred tempos as determined by the method of paired comparisons average about half a second.

In addition to the papers read at the meeting, the following were read by title: 'The Doctrine of Specific Energies,' by Mrs. C. Ladd Franklin; 'Visual Adaptation in Tachistoscopic Experimentation,' by Professor John A. Bergström; 'The Possibility of Retinal Local Signs of the Third Dimension,' by Dr. W. P. Montague; 'A Simple Method of Measuring Relationships,' by Professor E. L. Thorndike;

'Sex Differentiation in the Sense of Time,' by Professor Robert MacDougall; 'Some Psychological Aspects of Success,' by Brother Chrysostom; 'Early American Psychology,' by Professor I. Woodbridge Riley.

At the regular business meeting the following officers for the year 1906 were elected: *President,* Professor James Rowland Angell, University of Chicago; *Members of the Council,* Professor Mary Whiton Calkins, Wellesley College, and Professor C. E. Seashore, University of Iowa.

The following new members were elected: Dr. Elizabeth Kemper Adams, Smith College; Professor Bird Thomas Baldwin, West Chester Normal School, West Chester, Pa.; Dr. J. Carleton Bell, Wellesley College; Mr. Edward Herbert Cameron, Yale University; Mr. Donald John Cowling, Yale University; Dr. Kate Gordon, Mt. Holyoke College; Professor Edmund B. Huey, Western University of Pennsylvania; Professor Charles Hughes Johnston, State Normal School, East Stroudsburg, Pa.; Dr. Irving King, Pratt Institute; Dr. Adolf Meyer, New York State Pathological Institute; Dr. Naomi Norsworthy, Teachers College, Columbia University; Dr. James P. Porter, Clark College; Dr. Morton Prince, Tufts College Medical School; Miss Margaret S. Pritchard, Philadelphia Normal School; Dr. James Putnam, Harvard Medical School; Dr. Eleanor Harris Rowland, Mt. Holyoke College; Professor Henry A. Ruger, Colorado College; Dr. Boris Sidis, Brookline, Mass.; Dr. Theodate L. Smith, Clark University; Professor Edward G. Spaulding, Princeton University; Professor Herman Campbell Stevens, University of Washington; Professor Herbert Stotesbury, Temple College, Philadelphia, Pa.

It was voted to accept the invitation of Columbia University to hold the next annual meeting in New York, in affiliation with the American Association for the Advancement of Science and the American Society of Naturalists.

VIVIAN A. C. HENMON.

COLUMBIA UNIVERSITY.

REVIEWS AND ABSTRACTS OF LITERATURE

Ueber Musikalische Einfühlung. H. LIEBECK. *Zeitschrift für Philosophie und Philosophische Kritik,* Band 127, Heft 1. Pp. 1–18.

This article is a further addition to the rapidly growing literature on the subject of *Einfühlung,* or esthetic sympathy. Its aim is the examination of *Einfühlung* as it occurs in music and the application of the results of this investigation to the general problem. The author holds that music gives us a more or less definite picture of our own feeling life uninfluenced

by the accidents of real life, and hence in a kind of ideal purity. Music thus becomes for us an idealized *analogon personalitatis*,—a favorite term with this author. These feelings are not aroused in their full reality, though this may sometimes happen. But in the esthetic experience music presents us with *images* of feelings; these pictured feelings do not lead to action or willing. The feelings in question may be those with which we are familiar, though many namable ones, such as envy, jealousy, embarrassment, etc., can not be produced, and others for which we have no names may be brought about.

Music expresses not simply the dynamic side of feeling, changes in intensity, etc., but feelings which are qualitatively different; and this is not merely by virtue of the association of tones and their relations with form qualities: it can arouse them directly.

In every perception there are two moments, one subjective, *viz.*, the feeling tone of the perception; the other objective, its cognitive aspect. In esthetic as opposed to other perceptions these two are approximately in equilibrium. This is closest in the perception of a human personality: feeling and objective qualities are combined in one object. The esthetic object is analogous to this and is thus something which is felt to be akin to ourselves, something which we can enter into, in short, something in whose presence we experience this *Einfühlung*.

If I understand the author's meaning aright, there is first what might be described in the language of Professor Santayana and Dr. Thomas Brown as 'the objectification' of the feelings which the object arouses, except for the fact that the feelings are still thought of as feelings and not as qualities. These objectified feelings are united with the qualities of the object and seem to belong to it, to be its feelings. Hence it becomes a quasi-conscious being, and this allows us to enter into sympathy with it or even to identify ourselves with it. All of which may be true sometimes, but as Mr. Wernaer has recently pointed out in the same journal, it does not describe all esthetic experiences or even those that are most frequent.

Music, as we have seen, is endowed with the power (or so our author maintains) of picturing for us certain feelings. Other arts can do this only indirectly, through the medium of objects and ideas of objects: music does it directly. With other arts there is a fourfold process, sensation, perception of an object, feeling on occasion of this perception, *Stimmung*. In music the second member of this series is omitted, the feelings are pictured directly. This can be accomplished in a measure, though very imperfectly, in combinations of pure line and color. And music may employ discursive relations, but in general it produces its effect through intuitive relations, and the other arts work through discursive relations. We can get at the spirit of a painting or poem only after getting its various parts, just as we know an object only after getting its various qualities and relations; only after these latter processes have occurred can we really become intuitively aware of the object, while the spirit of music is intuitively grasped from the beginning.

The author maintains that Schopenhauer's distinction, on metaphysical

grounds, between music and the other arts is unnecessary and also too subjective. In all arts the essential thing is that the natural object no longer seems to belong to a strange world. This has a metaphysical ground, which is the same for all arts. Music is peculiar simply in the degree of immediacy with which this effect is produced.

The article closes with a brief discussion of the qualities which constitute a musical as distinguished from an unmusical nature in man. The possession of the audible or motor type of imagination is the first of these. To this must be added the capacity to represent the world of feeling in an immediate pictorial manner by means of tones, and also the need of overcoming in this way the duality and opposition of appearance and nature. The article is by no means easy to interpret. The author's style is none of the clearest and some of his positions would have been improved by further exposition. The whole thesis that feelings can be really pictured seems to the reviewer to demand further analysis and justification.

ADAM LEROY JONES.
PRINCETON UNIVERSITY.

The Practical Deductions of the Theory of Knowledge. D. H. MACGREGOR. *International Journal of Ethics,* January, 1906. Pp. 204–227.

The 'practical deductions' here discussed relate to the assumption of teleology and the consequent optimism; the theory of knowledge presupposed is that of Professor Ward's 'Naturalism and Agnosticism,' which has for its main position "the substitution of the 'duality of matter and spirit' for the 'dualism' of science and common sense."

Mr. MacGregor first deals with the presuppositions of teleology, finding them summed up in a certain coincidence between nature and thought, which in turn implies dualism, or at least the absence of necessary agreement. "In order that there may be a teleological interpretation, processes must coincide which are inherently distinct. But idealism does not grant the distinctness of thought and nature. According to it, these two in inseparable union constitute reality. But we may not condition reality" (p. 209). "We are entitled, therefore, when we see the demonstration of this unity by the idealists, to take them at their word; and, since the twin poles of the magnet are quoted as analogous to the relation of thought and nature, to ask whether it would be allowable to treat the positive and the negative poles as teleologically adapted. It belongs to the nature of the case. They could not exist otherwise than as they do. There is no contingency, but inherent and thoroughgoing interdependence between them."

After thus disposing of 'formal' teleology, the author addresses himself to the assumption of a more concrete teleology expressed in the phrase that 'nature is amenable to human ends.' He points out the want of logical connection between the two kinds of teleology. The latter, in so far as it is demonstrable and has real significance, is not so much a matter of epistemology as of ethics. The argument at this point is, however, of such a nature as not readily to admit of summary statement. Suffice it

to say that the incongruity between the implications of the psychology of effort and the epistemology of idealistic monism of the absolutist type is clearly brought out.

We have here an acute and conclusive criticism of the teleological doctrines of idealism. The problem of teleology is, however, only a single aspect of the comprehensive question as to the one and the many confronting the monist who regards the one as absolute and the many as relative. This is as true of the materialist as of the idealist. The terms being correlative, both must be regarded either as fixed or as functional. In default of a definite pronouncement or of a knowledge gained from other sources, one naturally tries to read between the lines to divine the author's own position. So largely critical is this study that the conclusion is not clear. There is, however, much that might be taken to indicate sympathy with the views of the pragmatists. W. A. HEIDEL.

WESLEYAN UNIVERSITY.

La Conscience. PAUL HERMANT. *Revue de Philosophie,* November, 1905. Pp. 495–511.

The thesis of this article is that consciousness corresponds to the activity which marks the development or the regression of the psychical life as a whole. Consciousness is the realization of a new equilibrium, a synthesis of the new with the old, or the process by which a new psychical state establishes connections with the 'unconscious' or subconscious psychical mass which is in the background and which represents our anterior attainments or *l'ensemble du moi.* It appears, then, that consciousness is a function of the psychical life as a whole. The subconscious is constituted by states which, for various reasons, necessitate no readjustment of the psychical whole and which for this reason fail to establish the associations required for recall in memory. But the author offers no suggestion as to the nature of the subconscious, beyond the vague statement that it differs from the conscious only in degree, nor does he at any point take account of the possibilities of interpretation in terms of neural processes. B. H. BODE.

UNIVERSITY OF WISCONSIN.

JOURNALS AND NEW BOOKS

THE MONIST. January, 1906, Vol. XVI., No. 1. *On the Form and Spectrum of Atoms* (pp. 1–16): FERDINAND LINDEMANN. – It is known that the distribution of spectral lines in the spectrum of any gas is a function of the form, density and elasticity of the atoms of that gas. The inverse problem of determining the form of an atom from a knowledge of its spectrum is possible in certain comparatively simple cases. The author illustrates by means of diagrams the probable shape of certain atoms and the structure of the molecules in which they are combined. *Manifestations of the Ether* (pp. 17–31): W. S. ANDREWS. – A

popular account of the ether of the electron as an ether vortex, of the atom as a congeries of electrons and of radioactivity. *Heredity and the Origin of Species* (pp. 32–64): DANIEL TREMBLY MACDOUGAL. – An elaborate and valuable exposition of the origin of species by hybridization and, more particularly, by mutation. Most interesting, perhaps, is the author's account of some experiments of his own, in which, by the intervention of external agents during the critical period, he induced mutations in a species not hitherto active in that respect. *Mathematical Emancipations. The Passing of the Point and the Number Three: Dimensionality and Hyperspace* (pp. 65–84): CASSIUS J. KEYSER. – Defining n-dimensionality as that feature of any assemblage whatsoever, in which, to distinguish an element, it is necessary to know n facts about it, the author proceeds to show that by taking the line or plane or circle as an element, spaces which are ordinarily regarded as having three or less dimensions may be regarded as having four or even more dimensions. The author closes his paper by suggesting that by becoming very familiar with the properties of a four-dimensional space of points we may possibly gain a *quasi* intuition of it. *Fechner's View of Life After Death* (pp. 84–95): EDITOR. – The author takes this occasion to expound and defend his own view of immortality as consisting in the preservation of an individual's ideals in the minds of those who live after him. Incidentally, he declares Fechner's conception of individual immortality to be fantastic and wholly unsupported by any evidence. *A Scientific Sketch of Untruth* (pp. 96–119): G. GORE. – A rambling account of the view that man's mind and will depend upon the material universe and its mechanically necessary laws. *Criticisms and Discussions: Haeckel's Theses for a Monistic Alliance* (pp. 120–123): P. C. – The author condemns Haeckel's theses as being likely to give offense because they declare dualism and pluralism to be incompatible with monism, and free will to be incompatible with determinism. *Reflections on Magic Squares, Mathematical, Historical and Philosophical* (pp. 123–147): EDITOR. – An elaborate account of magic squares, with remarks upon the symmetry of the universe. *Mr. Peterson's Proposed Discussion* (pp. 147–151): CHARLES SANTIAGO SANDERS PEIRCE. – The author urges the need of a discussion of philosophical terminology and gives an account of the meanings of the word experience. *Book Reviews and Notes:* J. Bahnsen, *Wie ich wurde was ich ward.* Shailer Matthews, *The Messianic Hope in the New Testament.* Lucien Arréat, *La Morale dans le drame, l'épopée et le roman.* Francis Galton and others, *Sociological Papers.* H. H. MacDonnell (tr.), *Brhaddevata.* G. Th. Fechner, *On Life After Death.* L. Arréat, *A Correction.* Galton and others, *Sociological Papers.* H. H. MacDonnell (tr.), *Brhaddevata.* G. Th. Fechner, *On Life After Death.* L. Arréat, *A Correction.*

McDougall, W. *Physiological Psychology.* (Temple Psychological Primers.) London: J. M. Dent & Co. 1905. Pp. 172.

Milhaud, G. *Études sur la pensée scientifique chez les Grecs et chez les modernes.* Paris: Lecène-Oudin. 1906. 8vo. Pp. 273.

Picard, É. *La Science moderne et son état actuel.* Paris: Ernest Flammarion. 1905. Pp. 299.

Prat. *Le caractère empirique et la personnalité.* Paris: F. Alcan. 1906. 8vo. Pp. 452.

Ragnisco, Pietro. *Pietro Abelardo e S. Bernardo di chiaravalle* (Atti del Reale Ist.). Venice. 1905.

Ralla, Guiseppe. *Avanzamento d'ipotesi.* (Pensiero o fantasia?) Carrara. 1905. Pp. 36.

Renouvier, Ch. *Critique de la doctrine de Kant.* Paris: F. Alcan.

Stern, L. William. *Beiträge zur Psychologie der Aussage.* Zweite Folge, Zweites Heft. Leipzig: Barth. 1905. Pp. 154.

Ziehen. *Leitfaden der physiologischen Psychologie.* 7th edition. Jena: Fischer.

ΑΠΟΣΤΟΛΙΔΗΣ. Φυσιολογίχη Αἰσθητίχη. Athens. 8vo.

NOTES AND NEWS

In the article entitled 'Lucretius and his Times' in the *Edinburgh Review* for January, the author approaches his subject as follows: "Not a few of those finer spirits have had it borne in upon them that they lived upon the brink of a new era, when the world, weary of ages of falsehood and wrong, will suddenly accept their message and society all at once be regenerated. But though Lucretius preaches his gospel with triumphant joy and faith, before him no such golden vista expands. He was possessed by the conviction that the end of the world was nigh at hand. It was one of the leading doctrines of Epicurean science that the world, like all organisms, was born and must have its period of growth, maturity and inevitable decay. To his boding mind the frequent earthquakes in Italy and elsewhere and the increasing barrenness of his own country indicated that the world had reached its extreme old age and was exhausted, and must soon break up."

Iamque adeo fracta est aetas effetaque tellus
Vix animalia parva creat quae cuncta creavit
Saecla dedique ferarum ingentia corpora partu.

De Rerum Natura is, in the writer's opinion, 'a genuine record of human experience, as direct and sincere' as the 'Pilgrim's Progress' of Bunyan. In a time of moral chaos Lucretius found spiritual satisfaction in the conception of physical order.

The article 'Plato and his Predecessors,' by F. C. S. Schiller, in the *Quarterly Review* for January, is interesting for a brief but telling appreciation of Protagoras. After commenting on the logical difficulties of Plato's 'Theory of Ideas,' Mr. Schiller exhibits his own well-known position in the following conclusion: "Even if by some strange chance he [Plato] had caught a glimpse of this way out he would have averted his eyes from the impious spectacle. The view that concepts are not unalterable and are only relatively constant (like mere material things), being essentially tools slowly fashioned by a practical intelligence for the mastery of its experience, whose value and truth reside in their application

to the particular cases of their use, and not in their timeless validity nor in their supra-sensible *otium cum dignitate* in a transcendent realm of abstractions, would have seemed to him as paradoxical and monstrous and unsatisfying as it still does to his belated followers. . . . Quite recently, indeed, the banner of what may prove to be a final revolt has visibly been raised; but is it not still inscribed with the hallowed Hellenic watchwords of *Γνῶθι σεαυτόν* and *Ἄνθρωπος μέτρον*?"

Nature for February 8 calls attention to two papers in the *Journal of the Asiatic Society of Bengal* (Vol. LXIII.) and summarizes them as follows: "Mr. J. E. Friend-Pereira has discovered totemism among the Khonds, where the wider totemic exogamy has been hidden by the narrower and probably newer rule of the 'local, communal, or family type.' The 'septs,' as the author terms the totem groups, have the ordinary totem taboos of feeding, use and marriage, and myths of origin. He believes totemism 'serves to mark to a primitive people who possess no written characters to record kinship and descent as they begin to get more remote in time the distinction between separate stocks of blood. In other words, totemism is merely a guide for the observance of the rules of exogamy: it is not the cause that originated or evolved these rules.' He holds that the explanation of the origin of totemism must be sought for, not in its social, but in its religious aspect. Among the Khonds 'the totem ranks as the spirit of the ancestor founder of the stock, who is also the chief tutelary deity of the stock, and the totem class is considered as a manifestation of the chief tutelary deity.' Major P. R. T. Gurdon has a valuable short paper on the Khasis, Syntengs and allied tribes of Assam, among whom mother-right so predominates that males can own only self-acquired property. There are traces of totemism. Ancestors are worshipped by the erection of remarkable memorial stones, of which two illustrations are given; this form of worship largely underlies the Khasi religious system. Divination by the breaking of eggs is very common. Major Gurdon is superintendent of ethnography in Assam, and is apparently preparing a monograph on the peoples under his charge which, judging from these notes, should be a valuable work."

THE first number of the *Biologisches Centralblatt* for 1906 is devoted to evolutionary conceptions of development and embryology. In a paper by Mr. Henriksen it is argued that everything in nature tends toward its own type of equilibrium. The author undertakes to show that Weismann's theory of germ-plasm structure is unnecessary and, when worked out in detail, absurd.

THE Western Philosophical Association will hold its sixth annual meeting at the University of Wisconsin, Madison, on Friday and Saturday, April 13 and 14, 1906, in conjunction with the meeting of the North-Central Section of the American Psychological Association. Five sessions will probably be held, of which one will be devoted to the annual presidential address, and one will be a joint session of the two associations. It is planned to set apart one session for a general discussion of the topic, 'Recent Arguments for Realism—with Especial Reference to the Relations of Realism and Pragmatism.' Members intending to

present papers are asked to notify the secretary, Arthur O. Lovejoy, Washington University, St. Louis, Mo., of their titles and the probable length of time required in delivery, not later than March 15. A detailed program will be issued to members about April 1.

WE take the following from the New York *Evening Post:* "A class exclusively for patients afflicted with mental disease has been organized in the dispensary of the Cornell University Medical College. This department will be under the charge of Professor Adolf Meyer. Hitherto there has been no such class in the city, though there are many of the poor not sufficiently deranged to be committed to asylums, who need more expert attention than can be given them at home. In addition to the philanthropic advantage, the new clinic will enable the student to observe in the early stages when mental disorders are most curable. On account of inexperience the average practitioner is likely to overlook these cases until they have passed the curable stage. Technically the clinic is known as the department of psychopathology."

PROFESSOR WILLIAM JAMES and Dr. James H. Hyslop, vice-presidents of the American Branch of the Society for Psychical Research, have issued the following letter: "In the death of Dr. Richard Hodgson, the secretary of the American branch since its foundation, the society, as well as his personal friends, has suffered a great loss. The work of the branch, however, will be continued under the direction of its vice-presidents or those appointed by them for the purpose until a satisfactory and efficient permanent arrangement can be made. In the meantime it is important that past subscriptions to the society's work should be continued, and new ones obtained if possible, as there is a mass of documentary material collected by Dr. Hodgson which awaits the completed critical treatment he would have given it had he lived, and which should now be dealt with. And there are also certain new and important possibilities of investigation which have just come into sight."

THOSE concerned with methods of pedagogy may be interested to know that the Cambridge University Press is publishing a series of short works on various subjects in pure mathematics and physics. The aim is to assist in maintaining a high standard in the English teaching of mathematics by presenting in a handy shape accounts of new methods and of recent mathematical research. The series bears the title of 'Cambridge Tracts in Mathematics and Mathematical Physics.'

THE National Educational Association will hold its forty-ninth annual convention at San Francisco, July 9 to 13. The department of superintendence met at Louisville, Ky., from February 27 to March 1.

THE first number of the *Zeitschrift für Aesthetik und allgemeine Kunstwissenschaft,* edited by M. Dessoir, has been published by F. Euke, Stuttgart.

AT Harvard University it has been decided to organize as a separate department the work in education, hitherto included under the department of philosophy.

PROFESSOR J. MARK BALDWIN is to lecture on genetic logic at the University of Chicago during the first half of the next summer quarter.

The Journal of Philosophy Psychology and Scientific Methods

There is no similar journal in the field of scientific philosophy. It is issued fortnightly and permits the quick publication of short contributions, prompt reviews and timely discussions. The contents of the last five issues are as follows.

Volume III. No. 1. January 4, 1906.

The Transcendence of Knowledge. WILLIAM ERNEST HOCKING.
Psychology and the Logical Judgment with Reference to Realism. J. A. LEIGHTON.
Societies: Section of Anthropology and Psychology of the New York Academy of Sciences. R. S. WOODWORTH.
Reviews and Abstracts of Literature. Journals and New Books. Notes and News.

Volume III. No. 2. January 18, 1906.

The Nature of Feeling. HENRY RUTGERS MARSHALL.
The Terms 'Conscious' and 'Consciousness.' JOHN DEWEY.
Discussion: Rejoinder. PERCY HUGHES.
The Privacy of Consciousness. WENDELL T. BUSH.
Dr. Baird's Criticism of the Iowa Studies in Psychology. JAMES BURT MINER.
Reviews and Abstracts of Literature. Journals and New Books. Notes and News.

Volume III. No. 3. February 1, 1906.

The Definition of 'Feeling.' H. N. GARDINER.
The Term 'Feeling.' MARGARET FLOY WASHBURN.
Discussion: Professor James's 'Hole.' HERBERT NICHOLS.
Societies: The Fifth Meeting of the American Philosophical Association.
Reviews and Abstracts of Literature. Journals and New Books. Notes and News.

Volume III. No. 4. February 15, 1906.

Is Absolute Idealism Solipsistic? F. C. S. SCHILLER.
The Interpretation of a System from the Point of View of Developmental Psychology. EDWIN TAUSCH.
Discussion: A Reply to Dr. Miner. J. W. BAIRD.
Reviews and Abstracts of Literature. Journals and New Books. Notes and News.

Volume III. No. 5. March 1, 1906.

The Nature of Consistency. G. A. TAWNEY.
Feeling as the Object of Thought. KATE GORDON.
Discussion: The Meaning of Identity, Similarity and Nonentity: A Criticism of Mr. Russell's Logical Puzzles. W. P. MONTAGUE.
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